Practice Set 15 Hypothesis Testing of Population Proportions

 Page 72 data showed 90% (45 of 50) of the 30-milligram parts, taken from a lot of 1,000 parts, passed inspection. Darin wants a .01 level of significance test to determine whether the population proportion of parts passing inspections has increased from the 86% reported last year.

II. Darin wants to determine at the .01 level of significance whether there is a difference in the proportion of defects produced during the day and night shifts. A sample of 100 parts was taken from each shift. The day shift had 5 defects and the night shift had 14 defects. Is there a difference in the proportion of defects produced by these two shifts?

Data Set For People Using Statistics Software